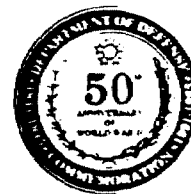




INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
400 ARMY NAVY DRIVE
ARLINGTON, VIRGINIA 22202-2884



AUG 23 1993

Analysis
and Followup

MEMORANDUM FOR ASSISTANT SECRETARY OF DEFENSE (COMMAND,
CONTROL, COMMUNICATIONS AND INTELLIGENCE)

SUBJECT: General Accounting Office Draft Report,
"CORPORATE INFORMATION MANAGEMENT: Management
Commitment Needed to Achieve Data Administration
Goals," Dated August 19, 1993 (GAO Code 510838),
OSD Case 9506--PREPARATION OF THE PROPOSED DOD
RESPONSE TO THE GAO DRAFT REPORT

On August 19, 1993, the General Accounting Office (GAO) submitted the subject draft report to the Department of Defense (DoD) for comment. A copy of both the transmittal letter and draft report is enclosed. In order to meet the 30-day comment requirement, the proposed response is due in this office by September 10.

An advance copy of the draft report previously was furnished to your action officer, Mr. Robert Molter--703-746-7926. Advance copies of the draft report were also provided to the following collateral action office points of contact:

- ARMY - Mr. Bruce Haberkamp--703-614-0755
- NAVY - Mr. Michael Minogue--202-433-5694
- AIR FORCE - MAJ Roger Van Epps--703-695-1704
- OCOMP, DOD - Mr. David Tiedgen--703-693-8344
- OD, PA&E - Mr. Michael Dominguez--703-695-4295
- DISA - Ms. Mary Jo Matera--703-285-5383
- DLA - Mr. Andrew King--703-274-1916

* * * *

Your office is the primary action office for the subject report. Applicable DoD Directive 7650.2 requires that the primary action office (1) review the subject draft report, (2) obtain input from the collateral action offices, (3) prepare a proposed response on behalf of the Secretary, and (4) forward the proposed response to this office for coordination and clearance--prior to its release to the GAO.

GAO REPORTS SUBJ/GAO REPORTS CHRON/DISTRIBUTION:
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DRAFT-PPRD AND FINDINGS/x30208/08-23-93;08-23-93;(08-23-93);08-23-93;
(08-23-3)

The generally applicable procedures for responding to GAO draft reports are described in a preprinted instruction, Information Sheet--Series B (copy enclosed). The procedures should be carefully reviewed. We call your particular attention to paragraphs 3 through 12. Draft report processing requirements include the following:

- annotating a copy of the GAO draft report to show needed factual and technical corrections (a copy of which will be provided to the GAO and this office);
- developing a DoD position on each finding and recommendation contained in the attached summary;
- holding an internal DoD meeting (premeeting) at which the draft written response is reviewed, discussed, any problems resolved, and the DoD positions consolidated;
- holding a meeting with the GAO to present the DoD official oral comments; and
- preparing the written DoD response.

Please note--even though official comments are presented orally on a draft report, it is Department policy to follow with written comments. Also, in preparing the written comments, please do not use either abbreviations or acronyms--other than "DoD," "GAO," "FY," and "U.S."

Please prepare a cover letter addressed to Mr. Donald H. Chapin, Assistant Comptroller General, Accounting and Information Management Division, U.S. General Accounting Office, Washington, D.C. 20548. The cover letter should be relatively short and (1) provide the overall DoD position on the report, (2) discuss any continuing disagreements with the GAO positions, and (3) provide any other general observations as may be appropriate.

The detailed DoD comments on the findings and recommendations should be provided as an enclosure to the cover letter. Any collateral action office input to your office should also be in that same format to facilitate the development of the response. Please remember that the DoD response should be able to stand alone--whether or not the report itself is available for reference.

The collateral action office input is due to your action officer by September 7. The annotated report copy should be available for review by my staff at the premeeting, which should be scheduled by September 10. The GAO meeting should

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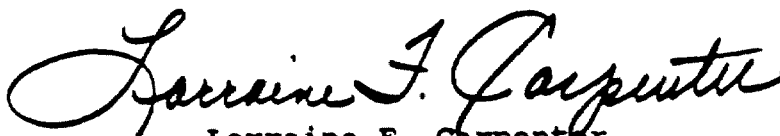
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be held by September 17. Please have your action officer contact this office immediately about the arrangements for the two meetings.

After the premeeting, and prior to the meeting with the GAO, your staff should finalize the written comments. By September 13 (under a transmittal memorandum), please provide this office with two copies of the unsigned proposed response to begin the coordination process. Adherence to the described schedule is critical so we can issue the signed DoD response by the 30th day--i.e., September 20. If the response is submitted to the GAO any later than 30 days after the DoD receipt of the draft, it may not be published as an appendix in the final report.

A reminder--all General Accounting Office draft documents remain the property of the GAO. They may be recalled by the GAO at any time. Under no circumstances are DoD staff to show or release the contents of the draft document outside the DoD. Within the Department, the information in the draft should be limited to those with a legitimate concern. The GAO draft information must always be safeguarded to prevent inadvertent publication or other improper disclosure. (Those same safeguards are applicable to the DoD response to the GAO draft.)

Questions may be directed to my action officer for this report, Ms. Judith Welch. If she is not available, please call Ms. Merlene Scales. Both can be reached on the same number--703-693-0208.



Lorraine F. Carpenter
Director for GAO Reports Analysis

Enclosures

Copies for CAOs:	SEC ARMY	DIR, PA&E
	SEC NAVY	DIR, DISA
	SEC AIR FORCE	DIR, DLA
	COMP, DOD	
Info Copies:	CMDT, USMC	USCINCCENT
	USD(A)	USCINCEUR
	ASD(P&R)	USCINCPAC
	ASD(SR&R)	USCINCSOUTH
	ATSD(LA)	USCINCSpace
	ATSD(PA)	USCINCSO
	DGC(F)	USCINSTRAT
	DIR, JS	USCINTRANS
	USCINCLANT	

**"CORPORATE INFORMATION MANAGEMENT: MANAGEMENT COMMITMENT
NEEDED TO ACHIEVE DATA ADMINISTRATION GOALS"**

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- **FINDING A: A Central Goal of Corporate Information Management Is to Improve Defense Operations and Reduce Costs through Improved Management of Information.** The GAO found that, despite almost 30 years of efforts to manage data as a corporate asset, the Department of Defense had been unable to standardize the data elements used in its information systems. The GAO observed that the following three factors contributed to the failure of past attempts at corporate data management.

- First, the DoD functional managers lacked an understanding of the importance of using information to manage business resources. The GAO noted that a Defense Executive Level Group affirmed this in a 1990 study of DoD management practices, finding that most DoD organizations typically did not use information to effectively control their operations and resources--but, rather, viewed information management as applying technology to reduce business costs.
- Second, the DoD lacked a framework for defining and integrating its data management activities department-wide. The GAO asserted that DoD data management directives allowed too much flexibility in their implementation.
- Third, the DoD lacked a common approach and methodology for identifying and describing its data requirements.

The GAO concluded poor data management practices within the DoD contributed to inefficiencies that increased business costs and hampered the ability to communicate data across

Defense information systems. The GAO pointed out, for example, that a data element (such as a Social Security Number) cannot be easily communicated if different systems use different data element names and formats. The GAO further concluded that the DoD failure to use standard data elements contributed to the chronic inability to exchange and combine critical data among its command and control, intelligence, combat support, and business information systems--and hindered the DoD ability to make effective decisions.

The GAO observed that to overcome those problems, in 1991, the DoD reissued its data administration policy, which set the following two primary goals for data administration:

- improve the availability, accuracy, timeliness, and quality of Defense data; and
- structure information systems to encourage data sharing, both within and outside the Department.

The GAO observed that the current policy directly supports the Corporate Information Management process model. The GAO further observed that the DoD policy assigned data administration responsibilities to several persons and organizations--(1) the Assistant Secretary of Defense (Command, Control, Communications and Intelligence) is responsible for prescribing and issuing data administration policies and procedures for use by DoD components, (2) the Director, Defense Information Systems Agency Center for Information Management serves as the DoD Data Administrator and supports the Assistant Secretary in those efforts, and (3) the Principal Staff Assistants Office of the Secretary of Defense and the heads of DoD components are responsible for defining their data requirements and implementing DoD data administration within their areas of responsibility, consistent with DoD policy. (pp. 4-7/GAO Draft Report)

- **FINDING B: Defense Has Not Determined Its Corporate Data Requirements.** The GAO concluded that the DoD has not determined what data it needs to manage on a department-wide basis. The GAO pointed out that, under the Corporate Information Management model, the Principal Staff Assistants in the Office of the Secretary of Defense--i.e., the DoD senior functional managers--should document their business goals, methods, and performance measures so the information can become the basis for determining the DoD corporate data

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needs. The GAO found, however, that the DoD has not been able to determine what its corporate data needs are or how to manage them--due to (1) DoD top management not having clearly defined roles and responsibilities for implementing Corporate Information Management and (2) a lack of uniform commitment on the part of senior DoD managers.

The GAO observed that the Corporate Information Management initiative envisioned senior DoD functional managers as being responsible for providing management direction of functional business processes and operations, including those currently managed by the Military Departments. The GAO concluded that, as such, the Corporate Information Management initiative calls for the managers to serve as proponents for improving the business processes within their respective functional areas. The GAO further concluded, however, that rather than viewing the initiative as an opportunity to improve their business processes, functional managers view Corporate Information Management as a technical initiative of the Office of the Assistant Secretary of Defense for Command, Control, Communications and Intelligence. The GAO also concluded that misperception is compounded by a lack of policy formalizing the roles and responsibilities of the senior functional managers under the Corporate Information Management initiative.

The GAO referenced its 1992 report (OSD Case 9235), in which it concluded that the Secretary of Defense needed to develop a management policy that clearly delineates how the roles and responsibilities of the senior functional managers within the Office of the Secretary of Defense should change to reflect the Corporate Information Management goals. The DoD pointed out that a January 1993 Department of Defense Inspector General Program Evaluation report reaffirmed that finding--noting that, to date, there were no approved Defense directives or instructions providing a clear definition of the Corporate Information Management initiative and defining the roles and responsibilities of Defense components. The GAO concluded that the described lack of commitment to Corporate Information Management jeopardized the success of Defense data administration. The GAO also asserted that, without a clear understanding of their roles and responsibilities, functional managers are reluctant to commit resources to Defense data administration, and the DoD cannot determine what data are needed to support DoD business operations without first documenting its functional business needs. (pp. 7-9/GAO Draft Report)

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- **FINDING C: Data Element Standardization Procedures Are Ineffective.** The GAO found that the DoD data element standardization procedures, issued in January 1993, are premature--because the DoD has not yet determined its corporate data needs. The GAO observed that, according to Defense policy, data element standards should be based on functional data models; however, the GAO noted that the DoD issued its data element standardization procedures before issuing guidance for developing, validating, and approving data models. The GAO concluded that, without data modeling guidance, attempts to apply the standardization procedures could lead to the standardization of data elements that do not meet the DoD corporate needs.

The GAO pointed out DoD policy states that data modeling should occur before data element standardization. The GAO observed, however, that applying the data element standardization procedures is step five in the data element standardization process--and that guidance for implementing steps one through three had not been completed--leaving the Department without the rules and standards needed to ensure a common approach to building, integrating, and approving data models. The GAO found that DoD components and agencies have initiated over 100 separate modeling efforts. The GAO concluded that the models will differ in quality and will not be compatible due to the lack of a common approach. The GAO further concluded that, consequently, it will be difficult and expensive, if not impossible, for Defense to consolidate and integrate the models to support the DoD data standardization requirements, as well as broader data administration goals. (pp. 9-11/GAO Draft Report)

- **FINDING D: The Defense Data Repository System Does Not Support Data Administration Goals.** The GAO concluded that the DoD corporate data dictionary (the Defense Data Repository System) was poorly planned and implemented--and is fundamentally flawed. The GAO observed that, contrary to the Corporate Information Management model, the Defense Data Repository System was developed prior to determining the methods, processes, and data needed to support Defense data administration. Further, the GAO found that the DoD populated the Defense Data Repository System with inaccurate data about existing nonstandard data elements. The GAO further concluded that, as a result, the DoD developed and is operating a data dictionary system that does not support (1) user needs, (2) known data dictionary requirements, or (3) Defense data administration goals.

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The GAO asserted that the DoD did not follow the Corporate Information Management process model to determine how the Defense Data Repository System would support department-wide data administration. The GAO found that, because of a desire to show progress in implementing data administration, the staffs of the Office of the Assistant Secretary of Defense (Command, Control, Communications and Intelligence) and the Defense Information Systems Agency did not follow the Corporate Information Management principles. The GAO observed that, instead, hoping to make a "quick-start" in implementing a data dictionary system, the DoD developed the Defense Data Repository System based on the Army data dictionary system. The GAO concluded, however, that the Defense Data Repository System cannot support several functions required of a data management support environment--such as developing, integrating, and storing data models. The GAO further concluded that, because the Defense Data Repository System is not capable of storing data models, the DoD established a second repository for that purpose--and changed its policy accordingly. In summary, the GAO concluded the repository does not meet Defense data administration needs because changes can be made in data models that are not reflected in the standard data elements.

The GAO also found other problems with the Defense Data Repository System data quality and compatibility. For example, the GAO noted that the Defense Data Repository System is populated with 32,000 data elements from existing management information systems that do not contribute to Defense data administration goals and, instead, perpetuate existing problems. First, the GAO pointed out that no effort was made to ensure the quality of the data in the repository system, and since the information may be inaccurate, any use of it would be inadvisable. Second, the GAO indicated that the data elements were older, nonstandard data elements taken from existing management information systems, which experts suggest actually increase the problem of incompatible data elements. The GAO concluded that Defense personnel are pursuing data administration activities that are (1) wasteful, (2) ineffective, and (3) do not support the DoD corporate data administration goals. The GAO further concluded that, unless the DoD functional managers follow through on Corporate Information Management implementation, the DoD will not achieve its data administration goals. (pp. 11-13/GAO Draft Report)

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RECOMMENDATIONS

- **RECOMMENDATION 1:** To ensure that corporate Defense data requirements are properly identified, the GAO recommended that the Principal Staff Assistants in the Office of the Secretary of Defense be required to document their business methods and performance measures prior to developing process and data models, in accordance with the Corporate Information Management model. (p. 14/GAO Draft Report)
- **RECOMMENDATION 2:** The GAO also recommended that, to ensure the data administration efforts more effectively support Defense data administration goals, the Secretary of Defense require the Assistant Secretary of Defense (Command, Control, Communications and Intelligence) to apply the Corporate Information Management model to determine clearly the Defense (1) data administration methods, (2) performance measures, (3) processes, and (4) data needed to manage DoD corporate data resources. (The GAO suggested that the Assistant Secretary of Defense (Command, Control, Communications and Intelligence) should solicit the active participation of Defense data administration customers in determining those requirements--including functional managers, component data administrators, and information system developers.) (p. 14/GAO Draft Report)
- **RECOMMENDATION 3:** The GAO further recommended that, to ensure data administration efforts more effectively support Defense data administration goals, the Secretary of Defense require the Assistant Secretary of Defense (Command, Control, Communications and Intelligence) to cancel the Defense Data Repository System operation and support activities, and take steps to acquire an information resource dictionary system based on the data administration process and data requirements identified above. (pp. 14-15/ GAO Draft Report)

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Accounting and Information
Management Division

B-253744

August 19, 1993

The Honorable Les Aspin
The Secretary of DefenseAttention: DOD Office of the Inspector General
Director for GAO Reports

Dear Mr. Secretary:

Enclosed are 10 copies of our draft report entitled Corporate Information Management: Management Commitment Needed to Achieve Data Administration Goals (GAO/AIMD-93-16, code 510838) for your review and comment. We are requesting that your comments be provided within 30 days of the date of this letter. If you are unable to provide comments within this period, please contact Franklin W. Deffer, Assistant Director, at (202) 512-6226.

We would prefer written comments, but oral comments are acceptable, provided your designee speaks officially for the Department. Please have your representative inform Mr. Deffer as soon as possible whether written comments will be provided. If they are not provided, a meeting can be arranged to obtain oral comments before the end of the 30-day period.

We will call your attention to the notice stamped on the cover of the draft report, regarding limitations on the use of the report and the need for safeguards to prevent its premature or unauthorized issue. We appreciate your cooperation and assistance in this matter.

Sincerely yours,

Donald H. Chapin
Assistant Comptroller General

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DRAFT REPORT
30-DAY OFFICIAL COMMENTS